

# Implementation Status of the CARB Composite Wood Products Regulation

---

Wood Moulding and Millwork Producers  
Association (WMMPA)  
Winter Business Meeting

March 25, 2010

Jim Aguila, Manager  
*Substance Evaluation Section*

California Environmental Protection Agency



Air Resources Board

# Presentation Overview

---

- Background
  - ATCM overview
  - Fabricator requirements
- Third party certification update
- CARB enforcement update
- Other implementation topics
- Question and answer session



# Airborne Toxic Control Measure (ATCM) Overview

---

- Establishes new formaldehyde emission limits for composite wood products: particleboard (PB), medium density fiberboard (MDF), and hardwood plywood (HWPW) panels
- Creates chain of custody documentation for products in the market
- Applies to products sold, supplied, used, or manufactured for sale in California
- Requires finished goods to be made from compliant PB, MDF, and HWPW panels
- Establishes enforcement program
- Includes sell-through provisions



# Comparison of ATCM Standards\*

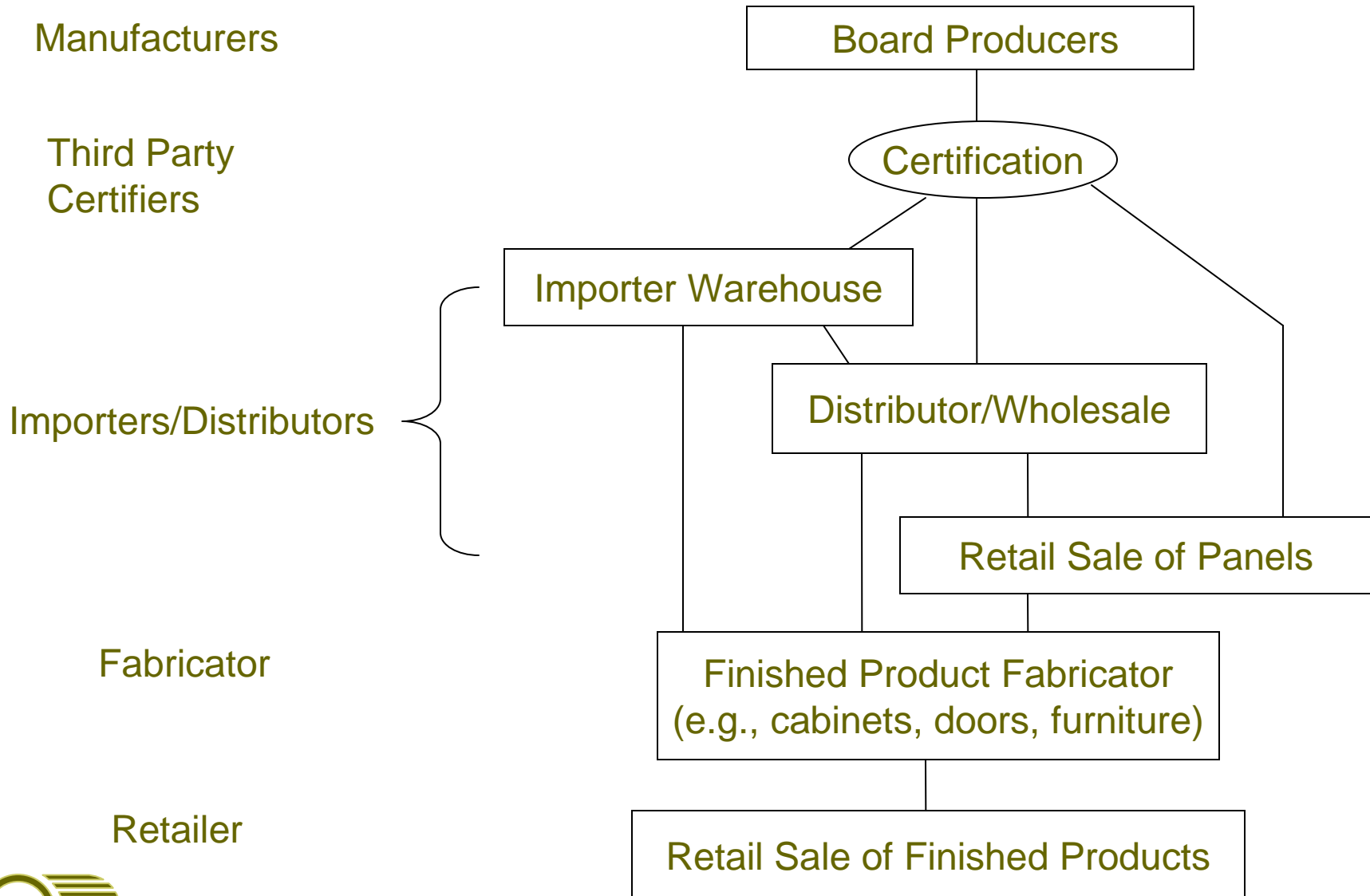
Effective Date	HWPW-VC	HWPW-CC	PB	MDF	Thin MDF
1-1-2009	P1: 0.08	-----	P1: 0.18	P1: 0.21	P1: 0.21
7-1-2009	-----	P1: 0.08	-----	-----	-----
1-1-2010	P2: 0.05	-----	-----	-----	-----
1-1-2011	-----	-----	P2: 0.09	P2: 0.11	
1-1-2012	-----	-----	-----	-----	P2: 0.13
7-1-2012	-----	P2: 0.05	-----	-----	-----
<b>HUD Std.</b>	<i>0.20</i>	<i>none</i>	<i>0.30</i>	<i>none</i>	<i>none</i>

\* Based on ASTM E1333-96 (2002); primary test method  
Phase 1 (P1) and Phase 2 (P2) emission standards (ppm)

HWPW-VC=hardwood plywood veneer core; HWPW-CC= hardwood plywood composite core;  
MDF=medium density fiberboard; PB=particleboard; ppm= parts per million



# Regulated Community



# Fabricator Requirements

---

- Under ATCM, fabricators are businesses that use composite wood products to make finished goods
- Required to meet emission standards by using certified HWPW, PB, or MDF panels to make finished goods
- Limited exemptions (windows and exterior doors)
- Additional requirements
  - Must take “reasonable prudent precautions” to ensure that composite wood products comply with the emission standards
  - Instructing suppliers; obtaining written documentation
- Product labeling – name, date, compliance level
  - Additional information on labeling requirements available at:  
<http://www.arb.ca.gov/toxics/compwood/outreach/labelingadv.pdf>



# Fabricator Requirements (*cont'd*)

---

- Statement of compliance on documentation
  - Must state on bill of lading or invoice that composite wood products or composite wood products contained in finished goods comply with standards
- Recordkeeping (2 years)
- Facility inspections



# Implementation Overview

---

- ATCM established first worldwide independent certification infrastructure for HWPW, PB, and MDF
- Market is adjusting to ATCM requirements
- CARB enforcement underway
- CARB monitoring sell-through provisions





# Third Party Certification (TPC) Program Update

---



# Third Party Certification Program

---

- ATCM established worldwide infrastructure for independent certification of composite wood products
- 33 CARB-approved TPCs worldwide (North America, Europe, Asia)
- TPCs provide two main services
  - Formaldehyde emission testing certification
  - Product certification



# Status of Certified Mills

## *Worldwide*

### Number of Certified Mills

Region	HWPW	MDF	PB	Total
North America	35	19	30	84
South America	10	5	--	15
Mexico	--	--	4	4
China	228	75	49	352
Southeast Asia	56	31	21	108
Europe	39	78	38	155
AU/NZ	--	6	--	6
Canada	11	7	5	23

Data from CARB website featuring certified mills on 3/24/2010:  
<http://www.arb.ca.gov/toxics/compwood/tpc/listofmills.htm>

*(Note: Some mills produce multiple certified products;  
Southeast Asia= Indonesia, Malaysia, Thailand, Vietnam)*



# Status of Certified Mills

## *Domestic*

---

- Number of certified mills by emission phase or exempt

	Phase 1	Phase 2	NAF/ULEF
HWPW-VC	N/A	29	12
HWPW-CC	16	4	4
PB	25	13	4
MDF	8	6	4

- CARB website featuring certified mills:  
<http://www.arb.ca.gov/toxics/compwood/tpc/listofmills.htm>



N/A=not applicable

# NAF/ULEF Program

---

- ATCM allows TPC exemption for manufacturers using no-added formaldehyde (NAF) or ultra low emitting formaldehyde (ULEF) resin systems
- Requires application with emissions data
- Approvals case by case
  - CARB Executive Order; 2-year approval
- 39 CARB approved (25 NAF; 14 ULEF)
  - [http://www.arb.ca.gov/toxics/compwood/naf\\_ulef/listofnaf\\_ulef.htm](http://www.arb.ca.gov/toxics/compwood/naf_ulef/listofnaf_ulef.htm)
  - 4 applications under review



# CARB Enforcement Program Update

---



# Enforcement

## *Field Inspections*

---

- Initial field inspections by CARB staff
- Inspect products for compliance with labeling requirements
- Check chain of custody documentation
- Field screening of product emissions
- Purchase products/samples at retail, commercial, and internet outlets
- Products/samples sent to CARB laboratory for testing



# Enforcement

## *CARB Emission Testing*

---



- CARB enforcement based on secondary test method
  - ATCM established emission standards based on primary test method (large chamber, ASTM E 1333)
  - Secondary test method is small chamber (ASTM D 6007) deemed equivalent to primary test method



- Field screening method
  - FLEC and portable formaldehyde analyzer





# Enforcement

## *CARB Testing of Panels & Finished Goods*

---

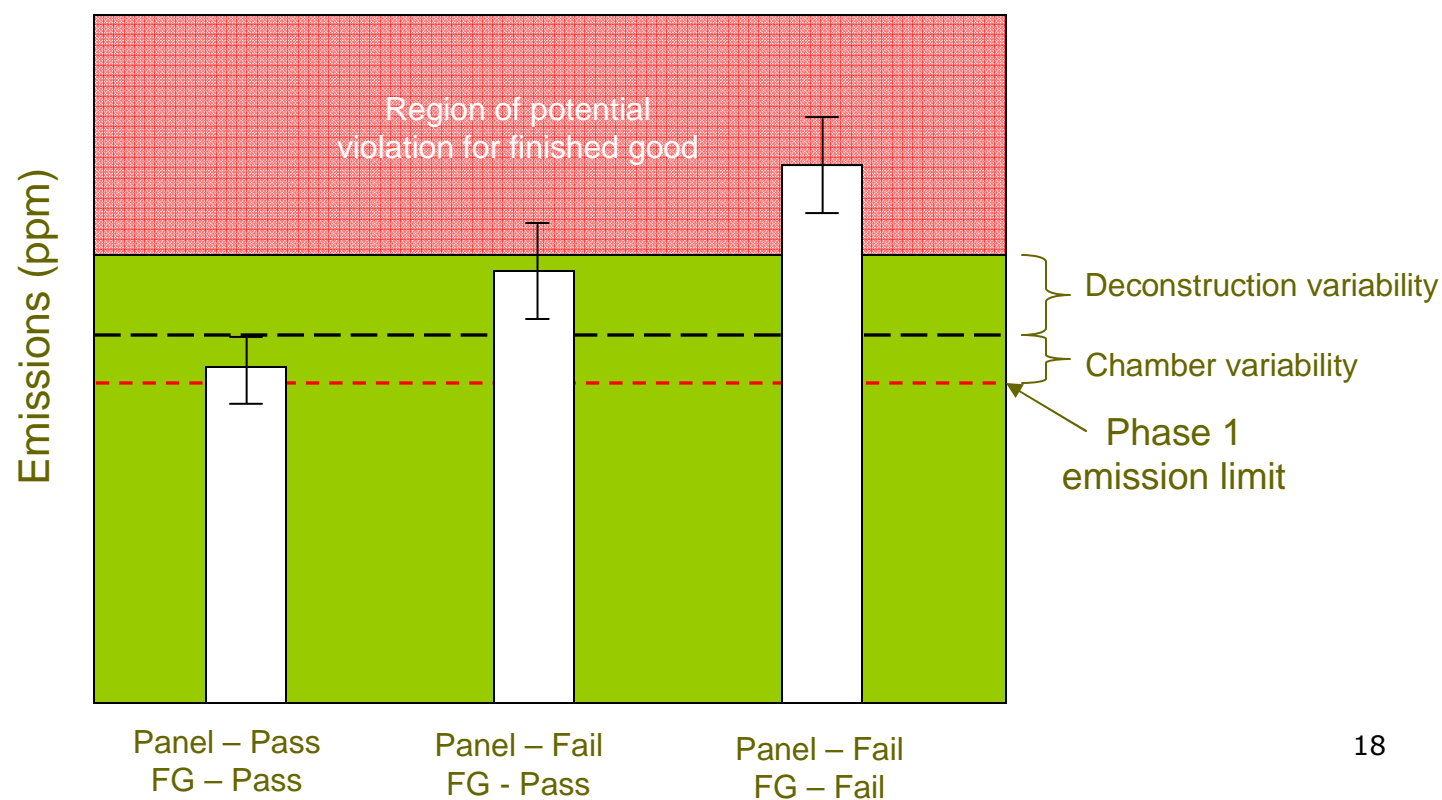
- Panels
  - Testing protocol based on secondary test method is established
- Finished goods
  - CARB working with stakeholders to develop protocol for testing finished goods (last conference call 2/25/2010)
  - CARB conducting emission studies on various products
  - CARB will share progress on testing approach



# CARB Enforcement Limit

Separate enforcement limits for raw panels and finished goods:

- Variability of the chamber test method
- Variability due to deconstruction of finished goods (FG)



# Enforcement

## *Investigations and Case Settlement*

---

- Evaluate information regarding non-complying products
- Determine responsible party
- Issue Notice of Violation
- Liability and case settlement



# Other Implementation Topics

---

- Monitoring of self-through provisions
- Tracking federal legislation (S.1660, H.R. 4805)
- TPC administration
- Topics to consider for potential ATCM amendments



# Monitoring of Sell-through Provisions

---

- Many sectors had backed up inventories
- Original ATCM timing did not reflect recession
- Sectors have different inventory issues and needs
- Issued Regulatory Advisory to provide enforcement delay



# Regulatory Advisory 09-04

*(November, 2009)*

---

	Date Specified in Regulation	Extended Date	Number of months Extended from Original Date
Distributors of Pre-Phase 1 HWPW-VC, PB, MDF, and tMDF	<i>May 31, 2009</i>	<i>December 31, 2010</i>	19
Distributors of Pre-Phase 1 HWPW-CC	<i>November 30, 2009</i>	<i>December 31, 2010</i>	13
Distributors, Importers, Fabricators, and Retailers of Pre-Phase 1 Finished Goods	<i>June 30, 2010</i>	<i>December 31, 2010</i>	6
Distributors of Phase 1 HWPW-VC	<i>May 31, 2010</i>	<i>December 31, 2010</i>	7



Website link to Regulatory Advisory 09-04:

[http://www.arb.ca.gov/toxics/compwood/outreach/09\\_04\\_advisory.pdf](http://www.arb.ca.gov/toxics/compwood/outreach/09_04_advisory.pdf)

# Monitoring of Sell-through Provisions

---

- CARB staff to continue to monitor sell-through provisions
- Sell-through provisions now in effect for Phase 2 HWPW



# Federal Legislation on Composite Wood Products

---

- Two federal bills introduced into congress
  - U.S. Senate Bill 1660 (Klobuchar)
  - U.S. H.R. Bill 4805 (Matsui)
- Amends Toxic Substance Control Act to direct U.S. EPA to adopt CARB ATCM by 2012
- Requires HUD to adopt CARB emission standards
- U.S. EPA staff in consultation with CARB staff
- No federal preemption





# TPC Administration

---

- Third party certification basis for CARB enforcement
- Created CARB-approved “TPC community”
- Relationship building
  - Individual contacts
  - Regional calls
- Establishing performance expectations
  - 2009 inter-laboratory comparison study (emission testing)
  - System procedural audits (product certification)
- CARB-issued TPC program guidance
- TPC Executive Order renewals



# Topics to Consider for Potential ATCM Amendments



---

- “Laminated products” vs. HWPW-CC
- Definition clarifications
- TPC program adjustments
- Rulemaking timeframe late 2011/early 2012



# Outreach to Affected Industries

- Regulatory advisories
- Fact sheets
- Outreach at conferences and trade shows
- Staff consultations
- Typical questions
- Updated FAQs

**Regulatory Advisory**  
November 12, 2008

**Composite Wood Products ATCM Advisory: 08-01**  
**Certification of "Non-complying Lots"**  
**Produced by CARB Certified Manufacturers**

This regulatory advisory is primarily directed to manufacturers of composite wood products and is intended to provide information regarding the handling of "non-complying lots." This advisory will explain provisions that can be applied by a manufacturer for inventories produced before being recognized as a producer of CARB compliant composite wood products by an approved third party certifier.

**Background**

In 2007, the California Air Resources Board (CARB) approved an airborne toxic control measure (ATCM) to reduce formaldehyde emissions from composite wood products. On January 1, 2009, the ATCM's Phase 1 emission standards will take effect for hardwood plywood with veneer core, particleboard, medium density fiberboard (MDF), and thin MDF (thickness 8 millimeters or less). The Phase 1 emission standard for hardwood plywood composite core will take effect on July 1, 2009. To be in compliance with the ATCM, domestic and foreign manufacturers are required to retain the services of a CARB approved independent third party certifier (TPC) to verify that their manufacturing mill production is in compliance with the applicable emission standards.

Numerous manufacturing mills have received their TPC approval as a producer of CARB certified composite wood products. Some of these certified mills have accumulated inventories of composite wood products that were produced before they received their official CARB certification approval by the TPC. CARB recognizes that some of these composite wood products emit formaldehyde at levels below the Phase 1 emission standards. These products that were produced before the mill was CARB certified may be retroactively certified using the "non-complying lots" provision in the ATCM.

**"Non-complying Lots"**

The ATCM provisions for "non-complying lots" may be utilized by manufacturers for panels that are still in their possession or under their control. Manufacturers that produce non-complying composite wood products, such as products produced before obtaining CARB certification, may retroactively deem those inventories as CARB compliant if they follow the provisions for "non-complying lots" specified in California Code of Regulations, title 17, section 93120.12, Appendix 2, subsections (g)(5)-(g)(8).

Below is a brief summary of the steps that must be followed, although manufacturers should read the full regulatory language to understand all of the requirements that must be met:

- 1) Manufacturers must have valid third party certification, per section 93120(3)(b).
- 2) The manufacturer's TPC must be notified.
- 3) If necessary, the "non-complying lot" may be treated to reduce formaldehyde emissions by using a scavenger or handled by other means, such as aging.

Page 1 of 2

<http://www.arb.ca.gov/toxics/compwood/outreach/advisories.htm>



# For More Information

---

**Visit our website:**

**<http://www.arb.ca.gov/toxics/compwood/compwood.htm>**



**Or contact us:**

**Jim Aguila, Manager**

**Phone: (916) 322-8283**

**Email: [jaguila@arb.ca.gov](mailto:jaguila@arb.ca.gov)**



# What are ARB's plans to Regulate Large Spark-Ignition (LSI) Engine Forklifts and Other Industrial Equipment?

---

- Website:
  - Factsheets, guidance documents, advisories, and FAQs etc.

<http://www.arb.ca.gov/lsi>
- Tutorial can be viewed at:

[http://www.arb.ca.gov/msprog/offroad/orspark/presentations/lsi\\_fleet\\_regulation\\_8\\_27\\_09.pdf](http://www.arb.ca.gov/msprog/offroad/orspark/presentations/lsi_fleet_regulation_8_27_09.pdf)
- Staff's contact number: 800-387-2992

<http://www.arb.ca.gov/msprog/offroad/orspark/contact.htm>



# Question and Answer

---

- What can be done with products that do not meet the Phase 1 standard?
  - extended sell-through periods
  - sell out of state
- Will there be an extension of sell-through period for Phase 1 products?
- How will Enforcement Division police imported products (i.e., false labeling)
  - can happen to any regulation and any products
  - help of the public and businesses (word-of-mouth)
  - complaints hotline 1-800-952-5588
  - additional staff involved (Southern California location)
  - wide variety of products are targeted

